

EXHIBIT E

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ORACLE AMERICA, INC.

Plaintiff,

v.

GOOGLE INC.

Defendant.

Case No. 3:10-cv-03561-WHA

EXPERT REPLY REPORT OF DENNIS ALLISON
REGARDING THE INVALIDITY OF U.S. PATENT NO. RE38,104

XI. THERE IS NO NEXUS BETWEEN THE ALLEGED COMMERCIAL SUCCESS AND THE PATENT CLAIMS

50. Dr. Goldberg concludes that the alleged commercial success of the Java virtual machine and Android's Dalvik VM "demonstrate the non-obviousness of the '104 patent." Goldberg Report ¶ 431; *see also id.* ¶¶ 423-430. I disagree with Dr. Goldberg's conclusion. As I explain above, the systems and methods disclosed in the '104 patent were readily available in the prior art. *See, e.g., Rau*. And counsel has instructed me that if commercial success is due prior art elements or techniques, no nexus exists, and the commercial success, if any, is not relevant to the obviousness inquiry. For this reason, no nexus exists between the alleged commercial success and the claimed invention.

51. Counsel has additionally instructed me that any alleged commercial success must be due to the features that are *claimed* in the '104 patent claims. If commercial success is due to something other than what is claimed, no nexus exists, and the commercial success, if any, is not relevant to the obviousness inquiry.

52. Dr. Goldberg concludes that a nexus exists between the '104 patent and the alleged commercial success of the Java virtual machine because "the Java interpreter only needs to incur 'the small expense of a name lookup the first time any name is encountered' and need not incur the expense the second time that name is encountered. After the interpreter performs the first name lookup, it can simply reference the 'numeric offset.' In this way, the '104 patent allows 'the Java interpreter to run at full speed.'" Goldberg Report ¶ 425 (citations omitted). In so concluding, Dr. Goldberg refers to the '104 patent generally, but does not mention features that are actually *claimed* by the '104 patent. In fact, not a single claim is cited, quoted, or referenced in Dr. Goldberg's entire three and a half page discussion of secondary considerations that allegedly relate to the '104 patent.

53. Dr. Goldberg's failure to discuss the *claimed* features is for good reason, namely, the '104 patent claims do not *claim* the allegedly novel feature that is described in the '104 patent specification (and also disclosed in *Rau*). To be sure, the asserted claims generally recite resolving symbolic references, storing the resulting numeric references, and obtaining data based on the numeric references. *See generally* '104 patent claims 11, 12, 17, 22, 27, 29, and 38-41. However, none of the asserted claims require that the interpreter obtains data a second time


based on the stored numeric reference. Yet this requirement is the basis for Dr. Goldberg's conclusion that the '104 patent results in faster interpretation. Because none of the claims actually *claim* this feature, there is no basis to conclude that a nexus exists between the *claimed* features of the '104 patent and the alleged commercial success of the Java virtual machine.

54. Similarly, and for these same reasons, I disagree with Dr. Goldberg's conclusion with respect to the commercial success of Android's Dalvik VM. Because none of the claims actually *claim* the Dalvik feature that Dr. Goldberg describes, there is no basis to conclude that a nexus exists between the *claimed* features of the '104 patent and the commercial success of Android's Dalvik VM.

55. Finally, I note that today's Java virtual machines contain or are associated with many other features—also not *claimed* in the '104 patent claims—that may function to increase the execution speed of the interpretation. For example, Dr. Goldberg incorporates by reference sections of Dr. Mitchell's Opening Patent Infringement Report that specifically discuss other features of the Java virtual machine that allegedly speed up execution. *See* Goldberg Report ¶ 21. In addition, increased processor and memory speeds, availability of optimized libraries, and other technological advances unrelated to the '104 patent claims result in increased execution performance of any virtual machine (Java or Dalvik).

Executed this 1st day of September, 2011.

I declare that to the best of my knowledge the foregoing is true and correct as to the facts stated and my opinions as expressed.



Dennis Allison